OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION:	**Inquest into the death of Little Gungallida Girl**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Cairns
FILE NO(s):	2009/1497
DELIVERED ON:	18 October 2010
DELIVERED AT:	Cairns
HEARING DATE(s):	18/05/2010; 28/07/2010; 24-27/08/2010; 18/10/2010
FINDINGS OF:	Kevin Priestly, Northern Coroner
CATCHWORDS:	CORONERS: Inquest – death of a child, adequacy of nursing and medical reviews, quality of care and treatment at Doomadgee Hospital, cultural sensitivity issues relating to the death of Aboriginal and Torres Strait Islander persons

REPRESENTATION:

To assist the Coroner	Ms Helen Price
For Family	Mr Richards I/by Hinds Lawyers
For Dr Zulfikar Ali Hudda	Mr Diehm I/by Blake Dawson
For Sue Kennard	Ms Feeney I/by Moray & Agnew
For Queensland Health & its employees	Ms Pyra I/by Cooper Grace Ward

FINDINGS

Little Gungallida Girl was 4 years of age and resided with her parents, Athol Walden Junior and Regina Nero, and her grandparents, Athol Walden Senior and Katrina Walden, together with two siblings at 224 Diamond Street Doomadgee.

In July 2009, the normally healthy and active Little Gungallida Girl did not appear well. At the same time, the community of Doomadgee was on alert for the swine flu epidemic. On 17 July 2009, Doomadgee had its first recorded case of swine flu. There were serious public health concerns about the potential harm an epidemic might cause this community. The Doomadgee Hospital was experiencing a large increase in the number of presentations with flu like symptoms. It was in this context that Little Gungallida Girl presented to Doomadgee Hospital.

The medical records show that Little Gungallida Girl presented on 19 July, 21 July and 22 July 2009. There is also evidence to suggest that she was presented to the Doomadgee Hospital on at least one other earlier occasion but was unable to be seen. On the first few occasions, she was seen with a raised temperature but did not appear distressed. She was treated conservatively.

On the night of 22 July 2009 she represented in the company of her grandmother and mother. She appeared to be in distress and breathing rapidly. Dr Hudda examined her and diagnosed an upper respiratory infection. She was admitted to the hospital overnight for observation and the infection treated with antibiotics. She appeared to settle, slept well overnight and had stabilised by morning. By mid morning, she appeared to have improved.

At approximately 4.00pm on 23 July 2009 Little Gungallida Girl's condition suddenly deteriorated. Arrangements were made to transfer her via RFDS to Mt Isa. However, Little Gungallida Girl's condition deteriorated further and in the presence of her parents, grandparents and medical staff she vomited and went into cardiac arrest. Efforts to resuscitate her were unsuccessful and she was pronounced deceased.

Cause of Death

On 28 July 2009 Dr Paull Botterill conducted an autopsy and concluded that Little Gungallida Girl died due to an aspiration of vomitus and its treatment due to rheumatic carditis against a background of respiratory tract infection. Dr Botterill concluded his autopsy report with the following summary of his findings and opinions:

> *"In plain terms, post mortem examination showed collapse of both lungs, placement of the emergency breathing tube in the soft tissues in front of the windpipe, some air and blood within tissues in the adjacent soft tissues of the neck, air within the stomach, some bleeding within the pancreas, and some air within the fatty tissues hanging off the edge of the stomach. In spite of the lung collapse, there was a suggestion of particular firmness of the upper part of the right lung. Other findings included enlarged lymph glands.*
>
> *In my opinion, at the time of autopsy, the cause of death was unclear, although the findings would have been consistent with a recent viral infection complicated by vomiting and inhalation of vomitus. Unfortunately, post mortem examination may not be able to demonstrate specific features (such as presence of vomitus material within the outer airways) that might appear to confirm this process, particularly because of the relative proximity of the episode of vomiting / inhalation prior to the*

time of death, as well as because of the effects of subsequent resuscitation efforts. The nature of the presumed recent viral infection was difficult to identify at the time of post mortem examination. It was also difficult to ascertain at that time whether transfer of the child to another facility in the preceding days would have necessarily had any impact upon the likelihood of the vomiting and presumed aspiration event.

Further investigations were subsequently performed. Microscopic examination showed heart muscle changes consistent with rheumatic fever, marked lung congestion and displaced gastric material in the lungs, and reactive changes in the haematopoietic tissues. Cultures showed Candida in a number of specimens, which in the absence of corresponding fungal elements histologically, almost certainly represents postmortem contamination rather than genuine antemortem fungal infection. Respiratory viruses were not detected. Testing for drugs and poisons was negative."

Continuing his findings and opinions, Dr Botterill reported:

"The most likely cause of severe deterioration in her condition, leading to the observed vomiting, possible perimortem aspiration and finally cardiac arrest was a cardiac rhythm irregularity complicating rheumatic carditis, although the possibility of a concurrent viral lung infection still cannot be completely excluded. The complications of attempted resuscitation, particularly the inadvertent peritracheal placement of the emergency tracheostomy tube, have further compromised the chances of her being able to be resuscitated, although it is not possible to ascertain whether she would have necessarily been able to be successfully resuscitated even if emergency tracheostomy had been successful.

There may be benefit in seeking the advice of an experienced emergency physician, intensivist, or ear nose and throat specialist regarding the expected degree of expertise required for such, extraordinary resuscitation measures.

The cause of death was most probably aspiration of vomitus and its treatment, complicating rheumatic carditis, further exacerbated by recent respiratory tract infection, most probably of viral origin."

Dr Duhig, Director of Anatomical Pathology at Prince Charles Hospital, was asked to review the findings at autopsy, the histological slides and the opinions of Dr Botterill. She concluded that the lungs showed findings indicative of aspiration complicating a pre-existing respiratory illness, probably a viral pneumonia, that caused diffuse alveolar damage, a condition that has a mortality rate between 40-60%. The heart showed cardiomegaly with changes consistent with acute rheumatic carditis which may result in cardiac dysfunction including arrhythmias. Dr Duhig considered it possible that the terminal aspiration happened in the context of the lower respiratory tract infection and a heart with rheumatic carditis precipitating an arrest.

Dr Slaughter, Paediatrician, and Dr Cameron Ward, Paediatric Cardiologist, provided reports to the court, principally addressing the issue of clinical management. Both experts conceded that the cause of death determined by Dr Botterill was possible. However, each raised other possibilities, although remote. To the extent that there is any difference of opinion, I prefer the analysis of the pathological findings and the relevant disease processes of Drs Botterill and Duhig.

I find that Little Gungallida Girl died due to an aspiration of vomitus and its treatment due to rheumatic carditis against a background of viral respiratory tract infection.

Issues for Consideration

In light of the cause of death and the circumstances surrounding the death, the following issues arose for consideration in this inquest:

Adequacy of Nursing Reviews

1. Were the nursing reviews adequate and if not, what contributed to any inadequacy?
2. Did the condition of the Little Gungallida Girl warrant referral by the nurses to Dr Hudda for review, and if so, what contributed to any such failure?

Adequacy of Medical Reviews

1. Did Dr Hudda adequately examine, diagnose and devise treatment plans for the Little Gungallida Girl?
2. Did her condition warrant earlier intervention in the form of a Paediatric review and or medical evacuation to Mt Isa; and if so, when and why?
3. In the event that earlier intervention was required and not recognised or actioned, what contributed to that shortcoming?

Before addressing these issues, a more detailed and better understanding of the clinical narrative is necessary.

Clinical Narrative

The clinical narrative relating to the presentation of Little Gungallida Girl was not in dispute at the hearing and is extracted from the medical records. Importantly, the narrative sets the context in which the issues arise.

At about midnight on 19 July 2009 Ms Nero presented Little Gungallida Girl to the Doomadgee Hospital reporting she had a temperature and had not eaten for 3 days. EEN Kennard recorded her weight as 15.8kg and the temperature as 38.1 degrees. EEN Kennard noted Little Gungallida Girl was tolerating fluids and had no vomiting or diarrhoea. Registered Nurse Mausolf then examined Little Gungallida Girl. She found her lungs had good air entry to all fields with no wheezes or crackles. Examination of the right ear revealed no abnormality. There was wax in her left ear. RN Mausolf was unable to view her tonsils because Little Gungallida Girl would not open her mouth. Her glands showed no abnormalities. Ms Nero reported that Little Gungallida Girl had complained of abdominal pain. The abdomen was soft with no guarding. There was no evidence of urine frequency suggestive of possible urinary tract infection. Analysis of her urine showed a ph of 7 with a specific gravity of 1015, trace albumen and moderate leucocytes. Little Gungallida Girl's pulse was 158/min (normal range is up to 140), respiratory rate at 32/min (normal range is up to 30) and oxygen saturation (SpO2) of 97% (normal).

At about 12.40am RN Mausolf administered Little Gungallida Girl with 9.6ml of Panadol and 6.5ml of Nurofen. She also noted that Little Gungallida Girl had a cough and runny nose. She was swabbed for swine flu. On review at 1.10am, Little Gungallida Girl's temperature had returned to normal and she appeared happy and alert. Ms Nero was provided with a dose of panadol to take home and administer, if necessary. Ms Nero and Little Gungallida Girl returned home.

On 21 July Ms Nero presented Little Gungallida Girl to the hospital where EEN Kennard checked her temperature (38.1° - just above normal) and weight. Panadol was again administered and Little Gungallida Girl was swabbed for swine flu.

At about 3.40pm on 22 July Ms Nero presented Little Gungallida Girl to the hospital where EEN Kennard recorded that Little Gungallida Girl presented for a temperature check and her temperature was recorded at 37.5°. She was then sent home.

Later that evening, the grandmother, Mrs Walden became concerned about the health of Little Gungallida Girl, fearing a more serious health complaint warranting a medical review and telephoned the Doomadgee Hospital. She spoke with EEN Kennard. During this conversation, Little Gungallida Girl's breathing was clearly audible in the background and sounded as if she was distressed. EEN Kennard requested Little Gungallida Girl be immediately brought to the Hospital.

Shortly afterwards at 10.40pm, Ms Nero and Mrs Walden presented to the hospital with Little Gungallida Girl. She was taken into the accident and emergency area by RN Mausolf and reviewed. RN Mausolf recorded that Little Gungallida Girl presented with rapid breathing (tachypnoea), a cough and a history of previous presentations over the last few days with fever. Examination revealed her temperature was 37.2°, a pulse of 148/min, a respiratory rate of 60/min (raised) and oxygen saturation of 79-80% on room air (low). Her weight remained normal at 15.8kg. Examination of lung function revealed reduced air entry to the lower lobe of her right lung, all other fields of her lungs were good and there was no wheezing or crackling from the other lung fields. RN Walsh also checked Little Gungallida Girl's lungs and confirmed RN Mausolf's findings. On administering 6 litres of oxygen per minute via an oxygen mask, Little Gungallida Girl's oxygen saturation returned to normal at 100%.

RN Mausolf was unable to view her throat because Little Gungallida Girl wouldn't open her mouth. She noted that Little Gungallida Girl had a moist cough, and a tracheal tug but no rib recession. RN Mausolf also noted a report of vomiting that night, no diarrhoea and that she had been eating and drinking.

At 10.50pm Little Gungallida Girls vital signs were again checked. The heart rate was 150/min and oxygen saturation had lowered to 78%. RN Walsh administered a nebuliser of 2.5mg of ventolin mixed with 2.5mL of normal saline. RN Mausolf contacted Dr. Hudda and requested he review Little Gungallida Girl.

Between 10.50pm and 11.40pm Dr Hudda attended the Hospital and examined Little Gungallida Girl. His medical notes are recorded as being written at 11:40pm.

He records that Little Gungallida Girl was admitted with fever, shortness of breath (rapid respirations) and a history of a cough for the past 2 days. He also notes that nasopharyngeal swabs were taken 2 days ago. Dr Hudda examines Little Gungallida Girl and records that she is not distressed. Her temperature was 37.2°, her respiratory rate was 45/min (raised), her heart rate was 120/min and her oxygen saturation on room air was 72% (low). She had a wheeze on expiration with crackles to the right lower and middle lobes of her lung.

Dr. Hudda diagnosed a respiratory tract infection. She was given 2L of 100% oxygen, started on a course of intravenous antibiotics. The antibiotic was ceftriaxone 500mg twice a day. He also prescribed Redipred 15 mg once a day to be taken orally for a total of 3 days, 225 mg of Panadol (liquid) four hourly and ventolin 2.5mg via nebuliser four hourly. He also prescribed IV fluids initially in the form of normal saline, however then prescribed saline and glucose, when informed that normal saline was not available. Dr. Hudda then left after Little Gungallida Girl had settled.

RN Mausolf and RN Walsh commenced administering the prescribed medication. RN Mausolf recorded that Little Gungallida Girl was commenced on IV fluids of dextrose/saline 3%/0.3% at 100 ml/hr at 11.40pm. IV antibiotics and RediPred were recorded as given at 11.45pm.

RN Mausolf recorded that Little Gungallida Girl remained tachypnoeic, had a respiratory rate of 68/min, with a tracheal tug and was using the accessory muscles, but there was no rib recession. Oxygen was continued at 2 L/min and her oxygen saturation rate improved to 99-100%. She was moved into the paediatric unit with her mother Ms Nero and Mrs Walden went home. Little Gungallida Girl was noted to cough up a thick yellowish sputum. RN Mausolf and RN Walsh made a decision to commence half hourly observations until 3am and afterwards, conducted hourly observations. There observations are summarised and tabulated as follows:

Time	Temp.	Heart Rate	Respirator Rate	O_2 Saturation	O_2 Delivery	Remarks
12.30		145/min	68/min	99%	2L/min	Asleep
1 am	36.6	139/min	68/min	99%	2L/min	Normal saline nebuliser given
1.30		130/min	72/min	99%	2L/min	Asleep sweating ++
2 am	35.8	125/min	68/min	100%	2L/min	Asleep
2.30		124/min	72/min	100%	2l/min	Asleep
3 am		122/min	64/min	100%	2L/min	Asleep
4 am		118/min	59/min	100%	2L/min	Asleep
5 am		112/min	56/min	100%	2L/min	Asleep
6 am	35.1	112/min	68/min	100%	2L/min	Asleep / Nebuliser

At 1.40am on 23 July, RN Walsh informed Dr. Hudda of Little Gungallida Girl's condition (that she had a higher respiratory rate than previously recorded), consequently he ordered that the ventolin nebuliser be replaced with normal saline nebuliser.

In addition to conducting half hourly and hourly observations RN Mausolf made it her sole priority to monitor Little Gungallida Girls condition, regularly checking on her condition throughout the night, and in addition to taking the usual clinical observations. At 6.16am she summarised her observations, recording that:

- Little Gungallida Girl had slept soundly all night but her respiratory rate remained very fast at 56-72/min.
- She was using the accessory muscles for respiration excessively and taking deeper breaths in (inspirations).
- Her pulse was down to 112/min, her oxygen saturation was 99-100% with 2L of oxygen per minute via a mask.
- Intravenous hydration continued at 100ml/hour, but she had not passed urine during the shift and had no oral fluid intake.
- A normal saline nebuliser had been given twice over the shift at 0100 and 0600.

The morning nursing staff (RN Strikis and RN Neal) continued to observe Little Gungallida Girl and recorded the following observations:

Time	Temp	Heart Rate	Respiratory Rate	Oxygen Saturation	Oxygen Delivery	Remarks
6.45		114/min	64/min	100%	2L/min	Asleep
7.50		121/min	48/min	100%	1L/min	Awake
9.00		127/min	44/min	97%	Room air	Awake, bowels open and passed urine

RN Strikis observed Little Gungallida Girl at 7.50am and then 9am when her oxygen was ceased because she was maintaining oxygen saturation on room air. Doctor Hudda reviewed Little Gungallida Girl at 9.45am and found her to be much improved. Her oxygen saturation was 100% on room air. She was afebrile (normal temperature), but her right lung still had crackles. He ordered that the same management continue.

The nursing staff continued to observe Little Gungallida Girl and recorded the following observations:

Time	Temp	Heart Rate	Respiratory Rate	O_2 Saturation	O_2 Delivery	Remarks
10.30		124/min	42/min	97%	Room Air	
12.30		127/min	60/min	100%	Room Air	Asleep
3 pm	35.8	132/min	52/min	100%	Room Air	
4.05	36.8	140/min	64/min	92%	Room Air	Discussed with Medical officer. Treatment saline nebuliser 2L of oxygen given at 1620
4.25						Loose bowel action, passed urine, vomiting back lunch and fluids. Blood sugar level 7.3.
4.45		143/min	64/min	77-88%	Room Air	To toilet. Has not passed urine. Alert Seen by Dr. Hudda
4.50						Vomited undigested food. Blood stain clear mucus coughed up.
5.05		143/min	56/min	56%	Room Air	Probe on great toe therefore oxygen on at 10L/min – 95% via Hudson mask. Child moaning at times

RN Strikis made observations at 10.30am and 12.30pm; and in her entry at 3.15pm recorded that Little Gungallida Girl's respiratory rate was 60/min at 12:30pm.

At 4.04pm RN Walker called Dr Hudda after findings of an abnormal heart rate of 140/min, a respiratory rate 64/min and an oxygen saturation of 92% on room air. Dr Hudda recorded that he advised RN Walker to give oxygen and saline via a nebuliser. He also noted that Little Gungallida Girl was afebrile.

At 4.45pm RN Walker noted that Little Gungallida Girl's oxygen saturation level dropped again and called Dr Hudda. He checked Little Gungallida Girl's chest and heard crackles in her right lung. Both Dr. Hudda and RN agreed that she needed transfer to Mt Isa. Dr Hudda left the room and telephoned the Paediatirician Dr Schemppe in Mt. Isa who accepted the referral of Little Gungallida Girl. RN Walker remained with Little Gungallida Girl and explained to her family the reasons for transfer.

At 4.50pm Little Gungallida Girl vomited undigested food into a vomit bag and had coughed up bloodstained mucous. At 5.05pm her oxygen saturation dropped to 56% on room air. RN Walker then commenced oxygen therapy at 10L/min which increased the saturation to 95%.

At 5.15pm the RFDS on-call medical officer received a call from Dr. Hudda requesting the transfer of Little Gungallida Girl to Mt Isa Hospital. The record made by the on–call medical officer noted that:

- Little Gungallida Girl was a 4 year old girl who presented with rapid breathing and reduced oxygen saturations the previous night;
- She was diagnosed with right sided pneumonia and had responded to oxygen and was commenced on IV antibiotics.
- The child initially improved but approximately 10 minutes prior to the call, had desaturated during a vomit to a level of 60% oxygen saturation. This improved to 95% with 10L/minute of oxygen.
- Dr Hudda reported that he had discussed the case with the on-call Mt Isa Paediatrician who had accepted the child for admission.
- Dr. Hudda requested that the child be transferred to Mt Isa as soon as possible.

Between 5.05 and 5.20 and after Dr Hudda had left the room Little Gungallida Girl vomited a pink stained mucus. Dr. Hudda was immediately called back and Little Gungallida Girl flopped on to the bed, copious clear and blood stained mucus came from her mouth and nose. She was immediately picked up and taken to the resuscitation room where resuscitation was commenced. At 5.20pm the RFDS on call medical officer activated the night crew for an urgent departure to attend Doomadgee Hospital. At 5.40 pm a further call was received from Doomadgee advising that Little Gungallida Girl had arrested and assistance was required urgently. The departure was upgraded to immediate. At 5.45 Little Gungallida Girl was intubated and at 5.50 Dr Hudda attempted to perform a tracheostomy. Resuscitation efforts proved futile and Little Gungallida Girl was pronounced deceased at 5.55pm. The RFDS aircraft which had begun to taxi in preparation for take off from Mt Isa was notified of the outcome.

The medical records do not fully record the reasoning underlying the decisions of Dr Hudda and therefore regard must be had to his evidence to complete the narrative.

The critical stages at which decisions were made about the management of the Little Gungallida Girl were on her admission to the hospital after presentation late on the night of 22 July 2009, and on review the next morning about 9am. The consensus of expert opinion was that any action taken beyond midday of the 23 July 2009 is unlikely to have effected the outcome. For example, if the decision was made to medically evacuate her in the early afternoon, she would not have reached Mt Isa Hospital and the higher level of care before her acute deterioration.[1]

In his statement, Dr Hudda described his examination of Little Gungallida Girl on the night of her presentation as follows:

> "*When I examined the child she was not distressed. She had only a slight temperature and although her respirations were high at 45 per minute they had come down from 60 per minute, which was what the triaging nurse had recorded. The child's heart rate had also settled down from the initial readings on being triaged. [Little Gungallida Girl's] oxygen saturations on two litres of oxygen were 100%. This was quite reassuring to me as two litres of oxygen is not very much. I suspected that the initial recordings of the oxygen saturations when [Little Gungallida Girl] was triaged (78% on room air) were probably due to a faulty machine, given the subsequent readings on only two litres of oxygen. The respiration rate and heart rate that I have recorded was my own personal observation and clinical assessment. The recorded temperature and oxygen saturation on room air was information told to me by the nurse. The oxygen saturation on two litres of oxygen was information available from the monitoring equipment being used.*"

[1] Dr Brown: Reported dated 17/3/10 - para C1/ii

As to his diagnosis and reasoning, Dr Hudda stated:

> *"My diagnosis was of a respiratory tract infection. Thus I prescribed an antibiotic Ceftriaxone 500mg. I would have preferred to give the child Rulide for a respiratory tract infection but the hospital did not have any. I also prescribed ventolin for the respiratory wheeze I had detected and the steroid Redipred in case the child was asthmatic. I ordered intravenous fluids because [Little Gungallida Girl] was very dry, by which I mean she was dehydrated. I asked the nurses to give [Little Gungallida Girl] normal saline. However, I was told by one of the nurses that they did not have normal saline and only had saline with glucose. I do not recall which nurse told me that. Thus I ordered the saline with glucose for the child. I subsequently found out the next day 23 July 2009, on enquiring with another nurse, that the hospital did in fact have normal saline available. I thereafter prescribed normal saline for [Little Gungallida Girl]."*

Dr Hudda reported that he did not consider there was a need for medical evacuation that night as he had diagnosed a respiratory tract infection and his plan was to see how Little Gungallida Girl responded to antibiotics, intravenous fluids and ventolin via nebuliser. He planned to review her progress and decide whether to continue with the treatment or initiate some other course of action.

Dr Hudda also recalls that during the night he was informed by a nurse that the Little Gungallida Girl's heart rate had increased and he ordered administration of the ventolin cease because it can increase the heart rate. He ordered nebulised saline be given instead.

As to other opportunities for investigation and treatment, Dr Hudda reported:

> "*With respect to the treatment initiated on the evening of 22 July 2009, although the hospital had x-ray facilities it did not have on staff a qualified x-ray technician to operate the x-ray machine. Thus I did not have access to x-ray films of the child's lungs which I would have liked to have had. Furthermore, while the hospital had an iSTAT machine for carrying out some blood test work I was informed by the nurse there were no more cartridges available to use in the machine. I would have ordered a full blood count and full electrolyte count had the iSTAT machine been capable of use, but in the circumstances could not do so. This is a fairly standard investigation on admission to hospital. The inability to do the test however, did not cause me to consider I ought to transfer the patient to Mt Isa as her clinical presentation did not indicate to me that the tests were essential. I did not order blood samples to be taken for septic screening because [Little Gungallida Girl] did not have a high temperature and did not have the appearance of being septic*."

Dr Hudda next reviewed the Little Gungallida Girl at 9.45am the next morning. In his statement, Dr Hudda reported:

> "*Following my review of [Little Gungallida Girl] I believed that she had improved overnight because she was afebrile. Her oxygen saturations that morning had been recorded as 100% on room air so as that if the machine reading of 78% on room air was accurate, that problem had resolved. In any case, the patient now had perfectly satisfactory oxygen saturations. Also, [Little Gungallida Girl] was quite happy that morning in the ward; she was watching television and was not distressed. She still had crackles in the right lung but you would not expect that to resolve overnight. She appeared to have slept overnight and her pulse rate had come down. The respiratory rate was still high but overall was less than what it had been during the night. I cannot now specifically recall whether I personally did a count of the respiration rate that morning or determined that information from the chart where it had been regularly recorded by the nurses. I believe that I probably did check the*

respiration rate myself but I have not recorded it in my note. In any case as I believed that [Little Gungallida Girl] had improved overnight with the treatment, my plan for the day was to continue that same treatment and monitor her to see if she continued to improve."

Dr Hudda then accounted for his activities during the balance of that morning and the early afternoon:

"I recall that after I reviewed [Little Gungallida Girl] I had very many patients to attend to. I recall dropping in to see her around 2pm after lunch. She appeared to be comfortable and was watching television with a friend. In the early afternoon I attended a public meeting for a couple of hours with the Director of Nursing and some Police Officers. The public meeting was to discuss issues regarding the Swine Flu. I attended that meeting which was in front of the hospital grounds for a couple of hours. I then returned to the hospital. It was on my return I was advised that I needed to see [Little Gungallida Girl]."

Finally, in relation to the deterioration of Little Gungallida Girl, Dr Hudda reported:

"*I ultimately made the decision to transfer [Little Gungallida Girl] to Mt Isa Base Hospital after I was informed by the Nursing Sister at around 1605 hours that her oxygen saturation had come down to 92%. I telephoned Dr Schempp, the paediatrician at Mt Isa Base Hospital and she agreed to accept the child. I then rang the RFDS to make arrangements for the transfer. I was on hold with the RFDS for a time because they were busy and had another patient to collect from, I think, Normanton. I recall that the RFDS said that they would pick that patient up first and then come to Doomadgee to pick up [Little Gungallida Girl]. Once the RFDS had agreed to pick up the child, I went to tell her grandmother about the transfer and was introduced to the grandfather, Athol Walden. It was after I left the ward and was heading to my office that I heard one of the nursing sisters calling my name. I returned to ward and saw that [Little Gungallida Girl] had deteriorated significantly. I think the nursing sister told me that [Little Gungallida Girl] had vomited and inhaled the vomit. I have described in my earlier statement to the Coroner the subsequent unsuccessful attempts made to resuscitate [Little Gungallida Girl]."*

During the course of the hearing, there was no challenge to the narrative provided by Dr Hudda. However, issue was taken with his clinical judgements and decisions.

Expert Review of Clinical Management - Medical

Dr Anthony Brown, a specialist in Emergency Medicine, provided a report dated 17 March 2010. Dr Brown's report was provided prior to the provision of a comprehensive statement by Dr Hudda. The initial brief to Dr Brown included a statement taken by a police officer. His later more comprehensive statement was clearly prepared with a greater focus on clinical detail.

Dr Brown reported that Little Gungallida Girl was seriously ill on presentation on the night of 22 July and while Dr Hudda made a reasonable presumptive diagnosis of respiratory tract infection and initiated appropriate treatment, he should have sought immediate paediatric advice and commenced arrangements for transfer to Mt Isa at first light where a higher level of investigation and care was available in the event of further deterioration. In support of his opinion, Dr Brown referred to the seriously abnormal vital signs at presentation which persisted during the night. Dr Brown also placed considerable of reliance on the fact that 1/2 hourly observations were initiated overnight and that this equated to the level of monitoring provided to a patient in intensive care. He inferred that this was a measure of the seriousness that Dr Hudda attributed to her condition. Dr Brown reasoned that if the Little Gungallida Girl needed intensive care, she should have

been transferred at first light. On this last point, the evidence is that the nursing staff made the decision about the frequency of clinical observations, not Dr Hudda.

Dr Brown also reported that once Little Gungallida Girl collapsed and went into cardiorespiratory arrest, it would have been an enormous challenge for any doctor, even one experienced in paediatrics, to have managed her successfully. In support of this opinion, Dr Brown noted:

> "*The overall survival rate of inhospital paediatric arrest event at the highest levels of care such as at a University affiliated teaching hospital is recognised to be less than 26% at best; that is 3 in 4 children who go into cardiac arrest would not survive.*"

It will be recalled from the clinical narrative, Dr Hudda attempted to perform a tracheotomy, and from the autopsy findings, the incorrect placement of the endotracheal tube is likely to have caused the lungs to collapse. Dr Brown reported that this procedure is technically demanding and he would not expect Dr Hudda to have the skill to do an emergency cricothyroid incision/tracheostomy, 'as few doctors have any practice or skill in this procedure'. Clearly, the attempt to perform this procedure was as a last resort.

During examination by Mr Diehm of Counsel for Qld Health, Dr Brown made a number of important concessions relevant to his opinions. Firstly, Dr Brown acknowledged that the subjective appearance of a child was an important clinical indicator of wellbeing, equally important as the vital observations. If Little Gungallida Girl did not appear ill, the nursing and medical staff may reasonably conclude that retrieval was not necessary. Secondly, Dr Brown acknowledged that there was a reduction in the frequency of observations from 1/2 hourly to hourly and then every 2 hours following a trend of improvement in some of her vital observations from the night of her admission to early following afternoon. Thirdly, an important indicator of improvement was the reducing need for supplemental oxygen till she saturated adequately on room air the next morning. Fourthly, although reluctantly, Dr Brown also accepted that Dr Hudda might reasonably conclude that the clinical improvement affirmed his diagnosis and treatment plan. Finally, when referred to the opinion of Dr Slaughter that it was reasonable to continue care at Doomadgee Hospital, Dr Brown maintained his view that the Little Gungallida Girl should have been transferred to Mt Isa. However, he stated that 'both of these attitudes are correct' and both views 'have merit'. In effect, Dr Brown accepts that there is a legitimate difference of medical opinion about how Little Gungallida Girl should have been managed, but neither view is incorrect.

Dr Slaughter, a Paediatrician, provided a report dated 28 June 2010 and gave evidence at the inquest. He reviewed the medical evidence and concluded that on the night of 22 July, the overwhelming feature of her presentation was marked rapid breathing and localised auscultatory signs of crepitations (crackles on inhalation) suggestive of pneumonia. The absence of a fever did not preclude pneumonia given that she presented with a history of fever. Dr Slaughter considered it reasonable for Dr Hudda to proceed on the basis that Little Gungallida Girl suffered from pneumonia and the administration of a broad spectrum anti-biotic was consistent with the clinical practice of a medical practitioner trained as a general practitioner. As to the review of Little Gungallida Girl the next morning, Dr Slaughter noted the clinical improvement reflected in the vital observations, in particular, the respiratory rate had fallen to 42 breaths per minute at 9am and she was saturating on room air. He concluded that it was reasonable for Dr Hudda to consider his therapy responsible for the improvement and that the clinical course was consistent with his diagnosis.

Finally, Dr Slaughter reported that there were clinical features that would, to a Paediatrician in contrast to a General Practitioner, raise the potential of a cardiac cause to the illness. The auscultatory findings (lung crackles) of pulmonary oedema, the rapid breathing and the absence of fever may have suggested a cardiac cause. He also observed that the frothy blood sputum just prior to cardiac arrest was strongly suggestive

of acute pulmonary oedema. Dr Slaughter emphasised that his was the opinion of a Paediatrician and he was not surprised that Dr Hudda as a general practitioner had not considered a cardiac cause to her illness. Dr Slaughter also reported that it was survival of the Little Gungallida Girl in Mt Isa Hospital would also have been improbable.

In a further report (Ex D10), Dr Slaughter expressed the view that it was not appropriate to arrange a medical retrieval in light of the clinical improvement on the morning of 23 July and that her sudden deterioration in the late afternoon was unexpected. He expanded on his view that retrieval to Mt Isa is unlikely to have affected the outcome, stating that even in paediatric intensive care units the outcome of such severe deterioration and cardiac arrest is bleak. Many patients who suffer cardiac arrest under these circumstances either die or suffer permanent injury. It will be recalled that Dr Brown offered the same opinion.

During the course of his evidence, Dr Slaughter said that at the time of admission of Little Gungallida Girl, he would not expect to be called in his capacity as a Paediatrician. The presentation of probable pneumonia is a common encounter and capable to management by a general practitioner. Further, if he had been contacted the next morning, in light of the clinical improvement in Little Gungallida Girl including the fact that she was comfortable, sitting up watching television; he would have advised continuation of the treatment plan and would not have considered transferring her.

Dr Cameron Ward, Paediatric Cardiologist, provided a report dated 11 July 2010 and gave evidence at the inquest. He reviewed the medical evidence and concluded that Dr Hudda's diagnosis of respiratory tract infection was 'entirely appropriate'. Dr Ward placed great emphasis on the value of a subjective assessment about the wellbeing of children, whether at a nursing level or a consultant medical level: " In paediatric medicine ... much emphasis is placed upon whether the patient looks sick". Dr Ward made reference to many instances in the medical records and the statements of nursing staff suggestive of the fact that Little Gungallida Girl was not acutely unwell. He concluded that there was no justification to transfer her in the middle of the night, nor the next morning when she was reviewed, particularly in light of her apparent improvement.

Expert Review of Clinical Management - Nursing

Dr Brown also considered and commented on the adequacy of nursing provided to Little Gungallida Girl during her presentations prior to admission. Dr Brown expressed the view that appropriate investigation and care was provided by nursing staff on review of Little Gungallida Girl on 19 July. However, he considered the nursing review on 21 July was inadequate as it appeared to be only a temperature check. He suggested nursing staff failed to recognise the purpose of a health check and that vital signs and observations should be taken as a minimum. Dr Brown was similarly critical of the nursing review on presentation of Little Gungallida Girl on the afternoon of 22 July, stating that although the temperature was raised, this was the third presentation and it warranted referral for a medical review.

Both presentations involved review by EEN Kennard. At the time of Dr Browns report, he had EEN Kennard's statement to police. At the time of providing her statement, both EEN Kennard and the interviewing police officer are unlikely to have appreciated that her involvement in the care of Little Gungallida Girl would be subject to scrutiny. A more comprehensive statement (dated 12 August 2010) was subsequently prepared with greater emphasis and more detail on the clinical management of Little Gungallida Girl. The subsequent statement also provided additional information not recorded in the patient charts. EEN Kennard also gave evidence at the inquest.

In her most recent statement, EEN Kennard set out the working arrangements that were implemented at the Hospital to screen people presenting with flu like symptoms in the context of a heightened state of alert for swine flu. Due to the staff levels and numbers of

presentations, nursing staff only had a limited opportunity for triage, just enough time to conduct a temperature check and provide some information about H1N1. People with symptoms warranting review by a registered nurse were referred on. I note this course was followed on the first presentation on 19 July. It also accords with evidence heard during the inquest about arrangements during the same period at hospitals elsewhere including Brisbane.

On the occasion of the review of Little Gungallida Girl on 21 July, EEN Kennard took her temperature and (although unrecorded) she observed her during the presentation. She had not deteriorated since review on 19 July and her appearance was consistent for a child with a cold or flu. She did not have difficulty breathing and appeared no worse than when reviewed by a registered nurse on 19 July. Panadol was given for the temperature.

EEN Kennard stated that in addition to taking the temperature of Little Gungallida Girl on presentation on 22 July, she looked her over to assess her condition. EEN Kennard reported she did not appear any worse than she had done the previous day. She did not notice any distress or difficulty breathing. Although she was quiet, she did not appear lethargic or lacking in energy.

During examination by Counsel for Ms Kennard, Dr Brown accepted as 'absolutely correct' that the swine flu protocol may have only required an EEN to conduct a temperature check, to provide Panadol if there were no other cold or flu symptoms and to swab for swine flu. He also accepted that it was important to visually assess the appearance of the child in relation to general wellbeing and that basic respiratory functioning might be checked in the same manner. Dr Brown also accepted that in the context of staffing levels at Doomadgee and during the heightened state of swine flu alert, not every presentation with a temperature could be seen by a registered nurse. Referral was a matter of judgement for an experienced Endorsed Enrolled Nurse. Dr Brown acknowledged that although desirable, it was understandable if workload did not permit comprehensive notes to be recorded for routine health checks.

On completion of examination by Counsel for Ms Kennard, Dr Brown conceded that in light of the additional information, an acceptable level of nursing care was provided. He also appeared to withdraw from his position that a referral to a medical officer was necessary on the third presentation. This view of his appeared to be attributable to a matter of personal preference and not attributable to any particular clinical standard.

Dr Slaughter addressed the issue of adequacy of nursing in his report, concluding that appropriate clinical evaluations were conducted during the nursing reviews on 19, 21 and 22 July. It is also important to note that all the experts placed considerable emphasis on the importance of the appearance of a child as an indicator of wellbeing when making clinical decisions.

Each of the nurses involved in the care of Little Gungallida Girl were appropriately qualified and experienced in providing care and treatment in rural and remote locations, including indigenous communities. Although initially critical of the quality of nursing care provided on two presentations of Little Gungallida Girl (21 and 22 July), when presented with a more complete clinical narrative, Dr Brown did not maintain his criticism.

Finally, even if there was evidence to suggest that the nursing reviews were inadequate, and I find there is no such evidence, it is clear that a more comprehensive nursing evaluation and referral to Dr Hudda would not have affected the decisions made by Dr Hudda about paediatric review or medical evacuation.

Other Matters

Although the central focus of the coronial investigation including this inquest was the quality of care and treatment provided to Little Gungallida Girl at Doomadgee Hospital, other matters came to light that warrant mention in these findings.

Root Cause Analysis

The Mt Isa Health Service District commissioned a Root Cause Analysis (RCA) on 4 August 2009 and the RCA team completed its report on 18 September 2009. The RCA carefully reviewed the clinical management of Little Gungallida Girl, identified opportunities for improvements in the quality of health service and recommended action to exploit those opportunities. In light of my earlier findings about manner and cause of death, the matters that are the subject recommendations would not have affected the outcome. Notwithstanding this fact, the recommendations remain important to the improvement of medical services at Doomadgee. Most of the recommendations have been partially or fully implemented. The recommendations include:

1. Review of the use of the Primary Clinical Care Manual (PCCM) to ensure better use as a clinical standard by medical officers and nurses;
2. Better orientation of medical officers and nursing staff prior to commencing duties on a range of subjects including service capability, fatigue risk management, the PCCM and emergency life support skills;
3. As to the level of paediatric experience and emergency skills;

3.1. An analysis of the rural sole practitioner GP be undertaken to determine minimum threshold credentials required to fulfil the role to assist in recruiting;

3.2. Medical officers serving rural and remote communities have current training appropriate to the position such as Pre Hospital trauma Life Support, Emergency Management of Severe Trauma, or Paediatric Advanced Life Support. They must also have Basic Life Support/Cardiopulmonary Resuscitation as an absolute minimum.

3.3. Consideration be given to services offered by Australian College of Rural and Remote Medicine as a first choice locum rural general practice relief services.

4. To heighten staff awareness of abnormal paediatric vital signs and act as an early warning tool, a clinical assessment and treatment form for children be devised and implemented with assistance from the Office of Rural and Remote Health incorporating the type and frequency of observations and triggers for medical officer review.
5. Develop a district protocol and criteria for escalation of cases to the District Paediatric specialist for all paediatric admissions to district hospitals.
6. Develop a district procedure that mandates the review of medical records for all paediatric re-presentations by a Paediatrician and mandatory handover to the local medical officer by the next day of all overnight paediatric presentations seen by registered nurses;
7. Review of IV fluids used on children with a view to removal of 3% Glucose and 1/3 Sodium Chloride as an available IV solution;
8. Review of District procedures to exclude Enrolled Nurses from assessing outpatients as primary providers and to cease the practice of 'temperature checks'.

I am satisfied that Mt Isa Health Service District has comprehensively reviewed the circumstances surrounding this death, fully explored what opportunities may exist to improve the quality of health care and taken the necessary action to implement the recommendations arising from that review.

Engagement with Next of Kin

The sudden and expected death of a young child is always tragic. The tragedy is compounded when the child dies following presentation or during admission to hospital

with what is thought to be a basic health complaint such as a common cold or flu. The community rightly has high expectations of our nursing and medical professionals. The tragedy is compounded by the huge gap between the expectation of treatment and recovery, and the outcome. Emotions are understandably high. In the immediate aftermath, there is limited information available. There is concern on the part of family and friends about the reliability of the initial sources of such information. There is concern that the information might be tailored or influenced by self interest. Family and friends have difficulty, particularly when grieving, understanding the complexities associated with the cause of death and its relationship to the treatment provided. Suspicions readily develop. These are all experiences that may occur anywhere in community, in city, rural and remote locations.

The difference at Doomadgee is that it's an indigenous community with a culture markedly different from those providing the medical services and seeking to engage with the family in the immediate aftermath of a death to explain the death and address these feelings. Other than hearing from the Forensic Pathologist who visited Doomadgee and met with the family shortly after an autopsy to explain his preliminary findings, the Walden family did not trust and declined the opportunity to meet with representatives of Qld Health. They preferred to await the outcome of the coronial investigation.

The question must be asked: What can be done to improve situations like this in indigenous communities?

A starting point might be how death is communicated to next of kin and dealing with the initial questions that inevitably follow.

At the inquest and through their Counsel, the Walden family expressed concerns about how the fact and circumstances of death were communicated to them. That issue was unable to be explored further. An issue arose about the extent to which Qld Health was in a position to respond to their allegations, the issue not having been the subject of witness statements prepared and distributed prior to the hearing. Fortunately, it did not become necessary to take evidence on the point as Counsel for Qld Health indicated that Qld Health would develop a protocol to guide health workers with this duty in a culturally sensitive and appropriate. A letter from Dr Michael Cleary, Deputy Director General of Health dated 26 August 2019 was tendered in evidence. Dr Clearly reported:

"*The culturally sensitive issues that surround the death of a loved one in an Aboriginal or Torres Strait Islander community are complex and vary between communities. Clinical staff are aware of the need to manage these circumstances in a sensitive manner and that communication with family members is critical."*

A comprehensive statewide guideline that specifically describes how a clinician may best respond to the complex and sensitive issues that surround the death of a loved one in an Aboriginal or Torres Strait Islander community has not been developed by Queensland Health. With the recent endorsement of the Queensland Health Aboriginal and Torres Strait Islander Cultural Capability Framework 2010 - 2033, the Aboriginal and Tones Strait Islander Health Branch plans to develop a series of underpinning guidelines that support clinical staff to provide culturally sensitive health services.

Within this context it is appropriate that Queensland Health develop a specific guideline which deals with the cultural sensitivity issues surrounding the death of a person in an Aboriginal and Torres Strait Islander community and the communication that may follow with families. I will request that the Aboriginal and Torres Strait Island Health Branch develop this guideline."

It may also be that the open disclosure process, a process that encourages frank and full disclosure to family of the findings of an internal review of clinical management, needs reworking or adaptation for use in indigenous communities to make it culturally

appropriate and sensitive. These steps might lead to greater success in engaging with indigenous families immediately after death and providing timely and reliable information to address any concerns and assist with grieving.

Conclusion

I find as follows:

1. Little Gungallida Girl died on 23 July 2009 at Doomadgee Hospital due to aspiration of vomitus and its treatment due to rheumatic carditis against a background of viral respiratory tract infection.

2. The nursing reviews on 19, 21 and 22 July 2009 were adequate in light of the presenting signs and symptoms. There was no need to refer Little Gungallida Girl for review to the Medical Officer, Dr Hudda.

3. However, late on the evening of 22 July 2009, there was a deterioration in the condition of Little Gungallida Girl and she was reviewed by Dr Hudda. He diagnosed an upper respiratory tract infection and commenced treatment including intravenous administration of antibiotics. His diagnosis and treatment was reasonable and appropriate.

4. Overnight, there was an improvement in her condition and by morning, she appeared to have stabilised, confirming in the mind of Dr Hudda his diagnosis and treatment plan. In light of her improvement, it was reasonable and appropriate for Dr Hudda to continue with the same treatment. There was no clinical need to consider medical evacuation or consultation with a Paediatrician. If consulted, a Paediatrician is unlikely to have taken a different course.

5. In the late afternoon of 22 July 2009 there was a sudden, unexpected and acute deterioration in the condition of Little Gungallida Girl. In light of her cause of death, there was no medical intervention reasonably available at Doomadgee that might have prevented her death. Further, if Little Gungallida Girl was transferred to Mt Isa Hospital, she is unlikely to have survived the cardiac arrest.

I recommend that Qld Health develop a specific guideline for health staff which deals with the cultural sensitivity issues surrounding the death of a person in an Aboriginal and Torres Strait Islander community (as foreshadowed by the Deputy Director of Health).

KJ Priestly
Northern Coroner
18 October 2010